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| LADAS & PARRY LLP 26 WEST 61ST STREET NEW YORK, NY 10023 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/588,322

Applicant(s)

KICHIKAWA ET AL.

Examiner

ANGELICA RUIZ

Art Unit

2169

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on July 9, 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The Action is responsive to Applicant's amendment, filed on July 9, 2008 and June 9, 2008.
2. It is acknowledged that as a result of the amendment, Claims 1, 10, 11, and 13 have been amended.
3. Claims 1-13 are pending.

Response to Arguments

4. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new grounds of rejection necessitated by Applicant's amendment of the claims.

In the Non-final rejection a typographical error was made concerning the cited art Kishimoto (US PGPUB 2002/0013829 A1), the applicant responded to this cited art which is stated also in the PTO- 892 form with the proper reference number. The Examiner assumes that the Applicant notice that informality and rely on the reference cited correctly to respond to the same.

Applicant argues in substance that Kishimoto art is not related to the inventive concept of the present invention, as stated in the Abstract ("...an information communication system comprising the information-processing apparatus and the server automatically transfers application programs and *data files from the storage means to an external recording medium such as the server itself* to be saved therein...") Kishimoto's prior art is related to application programs but it is also related to "data files" as claimed in the present application. The deficiencies in the mentioned prior art are

more related to the amended claim language "with respect to said apparatus to become a logged-on user" which are covered in the following rejection citing a different secondary prior art.

The Aim for Kishimoto is not solely to temporarily obtain an enough vacant area to store new application programs, it is also to authenticate the user that receives the "application programs" and "data files".

5. The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). *Limitations appearing in the specification but not recited in the claim are not read into the claim.* In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541,550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. The Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning

Claim Objections

6. Claims 1-11 are objected to because of the following informalities: all the numbers and enclosing parenthesis (e.g., (100)) citation to figures in the claims are improper. Appropriate correction is required. In view of reference paragraph for MPEP 608.01(m) the cited paragraph refers to "Reference characters corresponding to *elements* recited in the detailed description and the drawings" as for example: In Claim

1, "storage unit (SU)" abbreviation corresponding to the storage unit and the reference character being just the (SU), not the numbers. The objection is maintained.

Specification

7. A typographical error was made when referencing to previous form paragraphs regarding the specification objection for improper numbering, the mentioned rejection is withdrawn, does not pertain to the office action.

The Examiner acknowledges the shortened Abstract, the rejection pending is withdrawn.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 11 recite "with respect to said apparatus to become a logged-on user" it is unclear to the Examiner how the "predetermined user" can become a "logged-on user", now it is uncertain if the "multiple logon" is prohibiting other users to log on because then is said that "logon procedures by other users" until a logoff procedure concerning said "logged-on user". The Examiner is uncertain who the "predetermined user" is or if the applicant refers to one user log on and locking the access to "other users". Clarification on the "predetermined user" and "with respect to said apparatus to become a logged-on user" is needed. For the purpose of this office action the Examiner will not consider the word "predetermined" to have

only a "logged-on user", because if you predetermine that will be to decide in advance who is the "logged-on user" which in the claimed language renders the claim language uncertain. Claims 1 and 11 and its dependent claims 2-10 and 12-13 need further amplification. Proper correction is required.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1, 3-6, 9, 10, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kishimoto (2002/00138290 A1)**, in view of **IBM Technical disclosure (User Logon Profile, August 1991)**, hereinafter Kishimoto and IBM, respectively.

As per Claim 1, Kishimoto discloses:

- An information processing apparatus (100) comprising:

(Title, "Information-processing apparatus and information –processing method".)

- a data storage unit (110) for storing data files;

(Par [0009]) and (Par [0104], lines 5-6, "storage unit 136").

- a memory (130) for spreading data files, stored in the data storage unit, as necessary;

(Par [0072], "It should be noted that, when the information-processing apparatus ... wherein an **application program and data stored in the memory card 70 are automatically expanded** in the D-RAM 24.") and (Par [0003], "In addition, application software used in an information-processing apparatus is presented to the user by using media such as a disc or a memory card or downloaded to the apparatus through a communication line.") "expanded" being the "spreading" as claimed.

- a user management unit (140), preventing multiple logon by a plurality of users by prohibiting, after a predetermined user has performed a logon procedure with respect to said apparatus to become a logged-on user, logon procedures by other users until a logoff procedure concerning said logged-on user is performed (11);

(Par [0105], "The server controller 131 is a member for controlling server components for rendering services to download application programs to the information-processing apparatus ...the server controller 131 also executes various kinds of **management such as management/cataloging of users...**") and (Par[0149], "... transmits **authentication data** including the password to the server 130. In addition to the password, the authentication data includes the serial ID of the information-processing apparatus 1 and the **log-in ID**. The authentication data is information for the server 130 **authenticating the user.**")

- an spreading/storing unit (120), executing, based on an operation of said logged-on user, a file spreading process of spreading a

predetermined data file, stored in the data storage unit (110), onto the memory (130),

(Par [0107], "**Data of a user** includes ...the password of the user, the **log-in ID** of the user and the equipment serial ID **assigned to the information-processing apparatus 1** used by the user.") and (Par [0057], "FIG. 2 ... As shown in the figure, the information-processing apparatus 1 includes internal core members such as a system controller 21, a CPU (Central Processing Unit) 22, a flash **ROM (Read-Only Memory) 23** and a **D-RAM (Dynamic RAM) 24**. In addition, the information-processing apparatus 1 also includes an **operation unit 35**, a display control unit 27 and a display unit 2, which each serve as a **basic interface with the user**.").

- and a file storing process of storing a predetermined data file, spread on the memory (130), into the data storage unit (110);

(Par [0016], "...the information communication system automatically saves an application program or a **data file stored in the storage means** to the server or an external recording medium on the communication network in order to allocate a free storage...").

- a program executing unit (150), executing,

(Par [0144], "At the next step F303, the CPU 22 **executes the application program** to carry out processing based on the program.").

- based on an operation of said logged-on user, a predetermined application program and a process of preparing a new data file on the

memory (130) or a renewing process on an existing data file spread on the memory (130);

(Par [0138], "The application program AP3 and the **data file DT3** thereof are **saved in the saved-information storage unit 136**. As a result, since empty areas are created in the D-RAM 24 as shown in FIG. 9, the **application program AP-a** and the **data file ...** storage areas.") and (Par [0107], "**Data of a user** includes ...the password of the user, the **log-in ID** of the user and the equipment serial ID **assigned to the information-processing apparatus 1** used by the user.").

- a saving unit (160), executing, when said logged-on user executes the logoff procedure(2), a saving object recognizing process of recognizing, from among data files stored in the data storage unit (110), all or a predetermined Portion of data files prepared or renewed based on tasks by said logged-on user as a saving object file or files,

(Par [0114] The **saved-information storage unit 136** is a storage member which is used for saving data from the DRAM 24 employed in the information-processing apparatus 1 in accordance with a request made by the information-processing apparatus 1") and (Par [0196]).

- a saving process of copying and thereby saving the saving object file or files into an external storage device (300) via a network (200),

(Abstract, "...automatically transfers application programs and data files from the storage means to an external recording medium such as the server itself...") and (Par [0016], "...an external recording medium on the communication network...")

- a deleting process of deleting the saving object file or files stored in the data storage unit (110), a management information preparing process of preparing management information necessary for copying and restoring the saving object file or files, saved in the external storage device (300), into the data storage unit (110),

(Abstract and Claim 4," The information-processing apparatus according to claim 1, wherein if an **application program or a data file** saved in said external recording medium exists at completion of use ... to delete said active application program from said storage means in order to **restore said saved application program or saved said data file** from said external recording medium to said storage means by way of said communication means.").

- and a management information storing process of storing the prepared management information into an external storage location (400);

(Abstract and Claim 2, "...activation-history **management means for storing information** on an activation history for each application program and for updating said information on an activation history for a specific application program upon activation of said specific application program by said processing means; wherein said control means selects an application program **to be saved to said external recording medium** on the basis of said information on an activation history.").

- and a restoring unit (170), executing, as necessary after a specific user executes the logon procedure, a restoring process of referencing the management information and thereby copying and restoring the saving

object file or files, saved in the external storage device (300), into the data storage unit (110).

- (Par [0175], "In the mean time, the processing carried out by the server controller 131 goes on to a **step F115 to form a judgment as to whether or not a request for restoration** of saved data has been received from the information processing apparatus 1..." and (Par [0017], "In addition, if an **application program or a data file** saved in the external recording medium exists at completion of use of an active application program downloaded from the external server or at the time when the user finishes using it and carries out predetermined operation, the **application program is deleted from the storage means** in order to **restore the saved application program or the saved data file** from the external recording medium to the **storage means and reestablish** a state prior to downloading.") and (Par [0107], "**Data of a user** includes ...the password of the user, the **log-in ID** of the user and the equipment serial ID **assigned to the information-processing apparatus 1** used by the user.").
- "restoring unit" being also the "saved-information storage unit". Restoring is done in the mentioned unit also.

However Kishimoto does not disclose the underlined claimed features:

- *with respect to said apparatus to become a logged-on user,*
- **a logoff procedure concerning said predetermined user is performed (1);**
- **when a specific user executes the logoff procedure(2)**

On the other hand IBM discloses the claimed features as follow:

(Disclosure text, "...for both single and multiple local logons, the user can only have his user logon profile loaded when only single local logons are allowed. After a local user has logged on to User Profile Management with his user logon profile loaded, User Profile Management *will reject any local logon by another user*. When the first local user logs off from User Profile Management, his user logon profile will be removed from the system memory and then the second local user will be able to logon. Note: there is no automatic overlay of a user's user logon profile with another user's user logon profile under any condition. - A depiction of how the user logon profile is stored on disk is shown on the next page. - To make use of his user logon profile, the user simply logs on using his local user ID...").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to incorporate the teachings of IBM into the method of Kishimoto to take advantage of executing a specific procedure after logging off in the apparatus. The modification would have been obvious because one of the ordinary skills in the art would implement this log one user at a time to keep a system updated depending on user changes throughout logging in and out from the apparatus.

As per Claim 3, the rejection of claim 1 is incorporated and further Kishimoto discloses:

**- wherein the saving unit (160) recognizes a data file that is stored in a
priorly determined saving object folder as being the saving object file.**

(Par [0130], "Then, the information-processing apparatus 1 requests the server 130 to transmit the application program and the data file which have been saved in **the saved-**

information storage unit 136, storing the program and the file into the D-RAM 24. That is to say, **a state prior** to the downloading is restored. At that time, the save flag of the application program is reset to 0 in the application-history table.”).

As per Claim 4, the rejection of claim 1 is incorporated and further Kishimoto discloses:

- wherein the saving unit (160) recognizes a data file, having a file name with a priorly determined extension attached thereto, as being the saving object file.

(Abstract and Claim 12) and (Par [0130], “Then, the information-processing apparatus 1 requests the server 130 to transmit the application program and the data file which have been saved in **the saved-information storage unit 136**, storing the program and the file into the D-RAM 24. That is to say, **a state prior** to”) and (Par [0127], “After application programs and **the data files thereof stored** in the D-RAM 24 are saved into ... an activation count, a save flag, a temporary attribute and an address as an entry for the downloaded application program to the activation-history table. The OS sets the activation count as well as the temporary attribute at 1 and then puts the application program in an activatable state.”).

As per Claim 5, the rejection of claim 1 is incorporated and further Kishimoto discloses:

- wherein the saving unit (160), in executing the management information storing process, stores the management information into a removable, portable information recording medium (400), and the restoring unit (170),

in executing the restoring process, references the management information stored in the portable information recording medium (400).

(Par [0044], "It should be noted that the scope of the present invention is not limited to a **portable information-processing apparatus**. Instead, the present invention can be applied to **information-processing apparatuses of all types represented mainly by the personal computer.**") and (Par [0017], "In addition, if an application program or a **data file saved in the external recording medium ...**").

As per Claim 6, the rejection of claim 1 is incorporated and further Kishimoto discloses:

- wherein address information on the external storage device that is to be a saving destination of the saving object file is used as the management information.

(Abstract and Claim 6, "...saving request from said information apparatus, said control means stores an application program or a data file transmitted from said information processing apparatus in said saved-data storage means as saved data.") and (Par [0122], "The activation count represents the number of times the application program has been activated. The save flag indicates whether or not the application program has been saved in the **saved-information storage unit 136** employed in the server 130 in processing described later...The **address** indicates a location...").

As per Claim 9, the rejection of claim 1 is incorporated and further Kishimoto discloses:

- wherein in executing the deleting process, the saving unit (160) performs

a process of deleting even a saving object file that is spread in the memory.

(Abstract and Claim 4, " The information-processing apparatus according to claim 1, wherein if an **application program or a data file** saved in said external recording medium exists at completion of use ... **to delete** said active application program from said storage means in order to **restore said saved application program or saved said data file** from said external recording medium to said storage means by way of said communication means.").

As per Claim 10, the rejection of claim 1 is incorporated and further Kishimoto discloses:

A computer readable storage medium including a program that makes a computer function as the information processing apparatus (100) according to Claim 1.

(Par [0043], "The information-processing apparatus 1 is a compact, light and portable apparatus functioning as the so called PDA. A memory card 70 is mounted on the **information-processing apparatus 1 as a recording medium**. Data can be recorded and played back into and from the memory card 70. ") and (Par [0157], "In the mean time, the flow of the processing carried out by the CPU 22 goes on to a step F208 of the flowchart shown in FIG. 12 to form a judgment as to whether or not the total size of the selected application program to be downloaded and a data file relevant to the program has been received from ...").

As per Claim 13, the rejection of claim 11 is incorporated and further Kishimoto discloses:

- ***A computer readable storage medium including a computer program that makes a computer execute the saving step and the restoring step of the security ensuring method according to Claim 11.***

(Par [0043], "The information-processing apparatus 1 is a compact, light and portable apparatus functioning as the so called PDA. A memory card 70 is mounted on the **information-processing apparatus 1 as a recording medium**. Data can be recorded and played back into and from the memory card 70. ") and (Par [0157], "In the mean time, the flow of the processing carried out by the CPU 22 goes on to a step F208 of the flowchart shown in FIG. 12 to form a judgment as to whether or not the total size of the selected application program to be downloaded and a data file relevant to the program has been received from ...").

10. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kishimoto (2002/0013829 A1)**, in view of **IBM Technical disclosure (User Logon Profile, August 1991)**, and **Yamamoto et al (2005/0102491 A1)**.

As per Claim 2, the rejection of claim 1 is incorporated and further Kishimoto does not disclose:

- ***wherein the restoring unit (170) executes a preliminary restoring process of restoring a hierarchical structure of data files at a time of storage, and a***

main restoring process of restoring a specific data file selected from within the hierarchical structure restored by the preliminary restoring process.

On the other hand Yamamoto discloses the claimed features as follow:

- *wherein the restoring unit (170) executes a preliminary restoring process*

(Par [0018], "Moreover, ... execution of a call instruction for calling the predetermined function, and when the judgment by the decompression judgment unit is affirmative, the **restore unit** may decompress and then restore to the register the data saved in the stack memory when **execution of a return instruction for terminating the call of the predetermined function.**").

- *of restoring a hierarchical structure of data files at a time of storage, and a main restoring process of restoring a specific data file selected from within the hierarchical structure restored by the preliminary restoring process.*

(Par [0030] Here, the judgment unit may include: a detection subunit operable to detect a stack access function in the input program, the stack access function referring to the **stack memory in which the data** in the register have been saved, and the judgment unit may judge that the data retained in the register should be saved to the stack memory without being compressed in response to call of any of the stack access function and functions that position higher order than the stack access function in a hierarchical structure of functions included in the input program.") and (Par [0031], "With the stated construction, it becomes possible to exclude every function whose any lower-order function in its hierarchical structure is required to access the stack memory, from a target function whose guaranteed registers are to be compressed.").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to incorporate the teachings of IBM and Yamamoto into the method of Kishimoto to take advantage of executing a specific procedure after logging off and taking into account a hierarchical structure . The modification would have been obvious because one of the ordinary skills in the art would implement this to keep a system updated depending on user changes throughout logging in and out from the apparatus and use the hierarchical order.

As per Claim 12, the rejection of claim 11 is incorporated and further Kishimoto discloses:

- wherein the restoring step comprises a preliminary restoring step of restoring a hierarchical structure of data files at a time of storage, and a main restoring step of restoring a specific data file selected from within the hierarchical structure restored by the preliminary restoring step.

On the other hand Yamamoto discloses the claimed features as follow:

- wherein the restoring unit (170) executes a preliminary restoring process
(Par [0018], "Moreover, ... execution of a call instruction for calling the predetermined function, and when the judgment by the decompression judgment unit is affirmative, the **restore unit** may decompress and then restore to the register the data saved in the stack memory when **execution of a return instruction for terminating the call of the predetermined function.**").

- of restoring a hierarchical structure of data files at a time of storage, and a main

restoring process of restoring a specific data file selected from within the hierarchical structure restored by the preliminary restoring process.

(Par [0030] Here, the judgment unit may include: a detection subunit operable to detect a stack access function in the input program, the stack access function referring to the **stack memory in which the data** in the register have been saved, and the judgment unit may judge that the data retained in the register should be saved to the stack memory without being compressed in response to call of any of the stack access function and functions that position higher order than the stack access function in a hierarchical structure of functions included in the input program.") and (Par [0031], "With the stated construction, it becomes possible to exclude every function whose any lower-order function in its hierarchical structure is required to access the stack memory, from a target function whose guaranteed registers are to be compressed.").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to incorporate the teachings of IBM and Yamamoto into the method of Kishimoto to take advantage of executing a specific procedure after logging off and taking into account a hierarchical structure . The modification would have been obvious because one of the ordinary skills in the art would implement this to keep a system updated depending on user changes throughout logging in and out from the apparatus and use the hierarchical order.

11. Claims 7, 8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kishimoto et al. (2002/00138290 A1)**, in view of **IBM Technical disclosure (User Logon Profile, August 1991)**, and **Yano et al (2002/0138504 A1)**.

As per Claim 7, the rejection of claim 1 is incorporated and further Kishimoto discloses:

- *wherein the saving unit (160) executes, in executing the saving process, a process of dividing a saving object file into a plurality of division files based on a predetermined dividing method and saving the individual division files respectively into mutually different storage devices (310, 320, 330) and has a function of preparing management information that includes information indicating the predetermined dividing method, and the restoring unit (170) restores the saving object file based on the information indicating the predetermined dividing method that is included in the management information.*

(Par [0104], "FIG. 6 ... saved-information storage unit 136.") and (Par [0086], "Application software is executed under basic operations of such an OS configuration.").

However neither Kishimoto nor IBM disclose the underlined features.

On the other hand Yano discloses the claimed features as follow:

a process of dividing a saving object file into a plurality of division files based on a predetermined dividing method and saving the individual division files respectively into mutually different storage devices (310, 320, 330) and has a function of preparing

management information that includes information indicating the predetermined dividing method, and the restoring unit (170) restores the saving object file based on the information indicating the predetermined dividing method that is included in the management information.

(Abstract, "A distributed data archive device (1) is placed on an arbitrary location on a network (3) so that data can be saved and extracted. During data saving, a **to-be-saved data file (F1)** is given to the archive device (1), and a **division/encryption** means (13) ... A data **management means** (15) forms management data that shows a **division/encryption method** and a **depository-destination** data server, and records it **onto a portable recording medium** (10) during the data saving. ... the **divided files** are extracted from the depository destinations, and are reconstituted into the original data file (F1) by a decryption/integration means (14).") and (Par [0015], "FIG. 5 shows an example in which **save-destination information** is added to each divided file to be retained in a data server.").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to incorporate the teachings of IBM and Yano into the method of Kishimoto to take advantage of executing a specific procedure after logging off and use a dividing process . The modification would have been obvious because one of the ordinary skills in the art would implement this to keep a system updated depending on user changes throughout logging in and out from the apparatus and divide the files so they spread evenly on its destination.

As per Claim 8, the rejection of claim 1 is incorporated and further Kishimoto discloses:

Wherein the saving unit (160) executes, in executing the saving process, a process of saving a saving object file into the external storage device (300) upon encrypting the file based on a predetermined encrypting method and has a function of preparing management information that includes information indicating the predetermined encrypting method, and the restoring unit (170) restores the saving object file by executing a decrypting process based on the information indicating the predetermined encrypting method that is included in the management information.

(Par [0104], "FIG. 6 ... saved-information storage unit 136.") and (Par [0086], "Application software is **executed under basic operations** of such an OS configuration.").

However neither Kishimoto nor IBM disclose the "encrypting and decrypting"

On the other hand **Yano** discloses the claimed features as follow:

upon encrypting the file based on a predetermined encrypting method and has a function of preparing management information that includes information indicating the predetermined encrypting method, and the restoring unit (170) restores the saving object file by executing a decrypting process based on the information indicating the predetermined encrypting method that is included in the management information.

(Abstract, "A distributed data archive device (1) is placed on an arbitrary location on a network (3) so that data can be saved and extracted. During data saving, a to-be-saved

data file (F1) is given to the archive device (1), and a division/encryption means (13) carries out division/encryption, and individual divided files are distributed and saved onto data servers (2a, 2b, 2c) by a network communication means (16). A data management means (15) forms management data that shows a division/encryption method and a depository-destination data server, and records it onto a portable recording medium (10) during the data saving. During data extraction, the portable recording medium (10) is connected to an arbitrary archive device (1), and the management data is read. Based on this management data, the divided files are extracted from the depository destinations, and are reconstituted into the original data file (F1) by a decryption/integration means (14).")

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to incorporate the teachings of IBM and Yano into the method of Kishimoto to take advantage of executing a specific procedure after logging off and use a dividing process . The modification would have been obvious because one of the ordinary skills in the art would implement this to keep a system updated depending on user changes throughout logging in and out from the apparatus and divide the files so they spread evenly on its destination.

As per Claim 11, Kishimoto discloses:

**A method for ensuring security of data according to each individual user
when an information processing device (100),**

-comprising: a data storage unit (110) for storing data files;

(Par [0009], lines 3-4, "storage means for storing application programs and data files") and (Par [0104], lines 5-6, "storage unit 136").

- a memory (130) for spreading a data file, stored in the data storage unit, as necessary;

(Par [0072], "It should be noted that, when the information-processing apparatus ... wherein an **application program and data stored in the memory card 70 are automatically expanded** in the D-RAM 24.") and (Par [0003], "In addition, application software used in an information-processing apparatus is presented to the user by using media such as a disc or a memory card or downloaded to the apparatus through a communication line.") "expanded" being the "spreading" as claimed.

- a user management unit (140), preventing multiple login by a plurality of users by prohibiting, after a predetermined user has performed a login procedure with respect to said device to become a logged-on user, login procedures by other users until a logoff procedure concerning said logged-on user is performed;

(Par [0105], "The server controller 131 is a member for controlling server components for rendering services to download application programs to the information-processing apparatus ...the server controller 131 also executes various kinds of **management such as management/cataloging of users...**") and (Par[0149], "... transmits **authentication data** including the password to the server 130. In addition to the password, the authentication data includes the serial ID of the information-processing

apparatus 1 and the **log-in** ID. The authentication data is information for the server 130 **authenticating the user.**")

- a spreading/storing unit (120), executing, based on an operation of said logged-on user, a file spreading process of spreading a predetermined data file, stored in the data storage unit (110), onto the memory (130),

(Par [0107], "**Data of a user** includes ...the password of the user, the **log-in ID** of the user and the equipment serial ID **assigned to the information-processing apparatus 1** used by the user.") and (Par [0057], "FIG. 2 ... As shown in the figure, the information-processing apparatus 1 includes internal core members such as a system controller 21, a CPU (Central Processing Unit) 22, a flash **ROM (Read-Only Memory)** 23 and a **D-RAM (Dynamic RAM)** 24. In addition, the information-processing apparatus 1 also includes an **operation unit 35**, a display control unit 27 and a display unit 2, which each serve as a **basic interface with the user.**").

- and a file storing process of storing a predetermined data file, spread on the memory (130), into the data storage unit (110);

(Par [0016], "...the information communication system automatically saves an application program or a **data file stored in the storage means** to the server or an external recording medium on the communication network in order to allocate a free storage...").

- and a program executing unit (150), executing,

(Par [0144], "At the next step F303, the CPU 22 **executes the application program** to carry out processing based on the program.").

- based on an operation of a logged-on user, a predetermined application program and a process of preparing a new data file on the memory (130) or a renewing process on an existing data file spread on the memory (130);

(Par [0138], "The application program AP3 and the **data file DT3** thereof are **saved in the saved-information storage unit 136**. As a result, since empty areas are created in the D-RAM 24 as shown in FIG. 9, the **application program AP-a** and the **data file ...** storage areas.") and (Par [0107], "**Data of a user** includes ...the password of the user, the **log-in ID** of the user and the equipment serial ID **assigned to the information-processing apparatus 1** used by the user.").

- is shared by a plurality of users, the method for ensuring security in information processing apparatus being characterized in making the information processing apparatus (100) perform:

(Par [0106], "The user data base 132 is a member for storing data of **users** registered as recipients of services rendered by the server 130 to download programs to the information-processing apparatuses 1.")

- a saving step of executing, when said logged-on user executes a logoff procedure, a saving object recognizing process of recognizing, from among data files stored in the data storage unit (110), all or a predetermined portion of data files prepared or renewed based on tasks by said logged-on user as a saving object file or files,

(Abstract and Claim 11, "...the step of : storing ...") and (Par [0114] The saved-information storage unit 136 is a storage member which is used for saving data from the

DRAM 24 employed in the information-processing apparatus 1 in accordance with a request made by the information-processing apparatus 1")

- a saving process of copying and thereby saving the saving object file or files into an external storage device (300) via a network (200),

(Abstract, "...automatically transfers application programs and data files from the storage means to an external recording medium such as the server itself...") and (Par [0016], "...an external recording medium on the communication network...")

- a deleting process of deleting the saving object file or files stored in the data storage unit (110), a management information preparing process of preparing management information necessary for copying and restoring the saving object file or files, saved in the external storage device (300), into the data storage unit (110),

(Abstract and Claim 4, " The information-processing apparatus according to claim 1, wherein if an **application program or a data file** saved in said external recording medium exists at completion of use ... **to delete** said active application program from said storage means in order to **restore said saved application program or saved said data file** from said external recording medium to said storage means by way of said communication means.").

- and a management information storing process of storing the prepared management information into an external storage location (400);

(Abstract and Claim 2, "...activation-history **management means for storing information** on an activation history for each application program and for updating said

information on an activation history for a specific application program upon activation of said specific application program by said processing means; wherein said control means selects an application program **to be saved to said external recording medium** on the basis of said information on an activation history.”).

- ***and a restoring step of executing, as necessary after the specific user executes the logon procedure, a restoring process of referencing the management information and thereby copying and restoring the saving object file or files, saved in the external storage 6 device (300), into the data storage unit (110).***

(Par [0175], “In the mean time, the processing carried out by the server controller 131 goes on to a **step F115 to form a judgment as to whether or not a request for restoration** of saved data has been received from the information processing apparatus 1...”.) and (Par [0017], “In addition, if an **application program or a data file** saved in the external recording medium exists at completion of use of an active application program downloaded from the external server or at the time when the user finishes using it and carries out predetermined operation, the **application program is deleted from the storage means** in order to **restore the saved application program or the saved data file** from the external recording medium to the **storage means and reestablish** a state prior to downloading.”) and (Par [0107], “**Data of a user** includes ...the password of the user, the **log-in ID** of the user and the equipment serial ID **assigned to the information-processing apparatus 1** used by the user.”).

However Kishimoto does not disclose the underlined claimed features:

- a logoff procedure concerning said predetermined user is performed⁽¹⁾;
- when a specific user executes the logoff procedure⁽²⁾

However Kishimoto does not disclose the underlined claimed features:

- with respect to said apparatus to become a logged-on user,
- a logoff procedure concerning said predetermined user is performed⁽¹⁾;
- when a specific user executes the logoff procedure⁽²⁾

On the other hand IBM discloses the claimed features as follow:

(Disclosure text, "...for both single and multiple local logons, the user can only have his user logon profile loaded when only single local logons are allowed. After a local user has logged on to User Profile Management with his user logon profile loaded, User Profile Management *will reject any local logon by another user*. When the first local user logs off from User Profile Management, his user logon profile will be removed from the system memory and then the second local user will be able to logon. Note: there is no automatic overlay of a user's user logon profile with another user's user logon profile under any condition. - A depiction of how the user logon profile is stored on disk is shown on the next page. - To make use of his user logon profile, the user simply logs on using his local user ID...").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to incorporate the teachings of IBM into the method of Kishimoto to take advantage of executing a specific procedure after logging off in the apparatus. The modification would have been obvious because one of the ordinary

skills in the art would implement this log one user at a time to keep a system updated depending on user changes throughout logging in and out from the apparatus.

Neither Kishimoto nor IBM disclose:

A method for ensuring security of data according to each individual user when an information processing device (100),

On the other hand Yano discloses the claimed feature as follow:

A method for ensuring security of data according to each individual user when an information processing device (100).

(Par [0010], "Embodiments of the present invention provide an information-processing apparatus and a user-switching **method**, both can accomplish the switching of user with **high security**.").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to incorporate the teachings of IBM and Yano into the method of Kishimoto to take advantage of executing a specific procedure after logging off and use a dividing process . The modification would have been obvious because one of the ordinary skills in the art would implement this to keep a system updated depending on user changes throughout logging in and out from the apparatus and enforce security according to each user's data.

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANGELICA RUIZ whose telephone number is (571)270-3158. The examiner can normally be reached on 8:00 a.m. to 4:30 p.m., ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ali can be reached on (571) 272-4105. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Angelica Ruiz
Examiner
Art Unit 2169

/Jean M Corrielus/
Primary Examiner, Art Unit 2162